RESULT 7
AAC83248
ID AAC83248 standard; DNA; 1749 BP.
XX
AC AAC83248;
XX
DT 14-MAR-2001 (first entry)
XX
DE Cellulose synthase promoter sequence SEQ ID 3.
XX
KW Cellulose synthase; lignin; secondary cell wall construction; wood pulp;
KW transgenic plant; paper manufacture; promoter; ds.
XX
OS Unidentified.
XX
PN WO200070058-A2.
XX
PD 23-NOV-2000.
XX
PF 17-MAY-2000; 2000WO-GB001890.
XX
PR 18-MAY-1999; 99GB-00011379.
XX
PA (UYMA-) UNIV VICTORIA MANCHESTER.
XX
PI Turner S, Taylor N;
XX
DR WPI; 2001-041015/05.
XX
PT Cellulose synthase gene expressed during deposition of secondary cell
PT walls in lignin-containing cells, useful for modulating expression of
PT enzymes involved in synthesis of plant cell walls and to produce
PT transgenic plants.
XX
PS Claim 10; Page 30-31; 49pp; English.
XX
CC This invention relates to a cellulose synthase gene expressed during the
CC deposition of secondary cell walls in cells containing lignin. The
CC cellulose synthase gene is useful for regulating the expression of genes
CC specifically during secondary cell deposition in lignin containing cells.
CC It can be used to modify the structure and cellulose content of plant
CC secondary cell walls and to produce altered plant phenotypes specific to
CC the needs of a particular industry such as in reducing the lignin of wood
CC pulp for paper manufacturing. A construct containing a cellulose synthase
CC promoter sequence and a gene of interest may be used in a method for the
CC production of the product of the gene of interest in a host cell that
CC produces lignin, where the product is produced only during secondary cell
CC wall synthesis. The present sequence represents a cellulose synthase
CC promoter which can be used in the invention for the production of
CC transgenic plants expressing an exogenous gene during secondary cell wall
CC deposition in cells containing lignin
XX
SQ Sequence 1749 BP; 551 A; 290 C; 354 G; 554 T; 0 U; 0 Other;

Query Match 19.8%; Score 399.2; DB 4; Length 1749;
Best Local Similarity 77.8%; Pred. No. 7.1e-92;
Matches 602; Conservative 0; Mismatches 123; Indels 49; Gaps 8;

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RESULT 8

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RESULT 13
ATU41339
LOCUS ATU41339 1905 bp mRNA linear PLN 23-OCT-1996
DEFINITION Arabidopsis thaliana ANT (AINTEGUMENTA) mRNA, complete cds.
ACCESSION U41339
VERSION U41339.1 GI:1244707
KEYWORDS .
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE 1 (bases 1 to 1905)
AUTHORS Elliott,R.C., Betzner,A.S., Huttner,E., Oakes,M.P., Tucker,W.Q., Gerentes,D., Perez,P. and Smyth,D.R.
TITLE AINTEGUMENTA, an APETALA2-like gene of Arabidopsis with pleiotropic roles in ovule development and floral organ growth
JOURNAL Plant Cell 8 (2), 155-168 (1996)
MEDLINE 96351414
PUBMED 8742707
REFERENCE 2 (bases 1 to 1905)
AUTHORS Smyth,D.R.
TITLE Direct Submission
JOURNAL Submitted (27-NOV-1995) David Smyth, Genetics and Dev. Biology, Monash University, Wellington Road, Clayton, VIC 3168, Australia
FEATURES Location/Qualifiers
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RIGIN

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 Best Local Similarity   75.4%;  Pred. No. 4.9e-68;
 Matches  411;  Conservative    0;  Mismatches  134;  Indels    0;  Gaps    0;

y        714 AAAACTATTGAGAGTTTTGGACAGACGAACGTCTATATACCGCGGTGTTACAAGGCATCGG 773
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b        851 AAATCTATCGATACTTTTGGACAACGAACTTCTCAATACCGAGGCGTTACAAGACATAGA 910

y        774 TGGACAGGAAGATATGAGGCACATTTATGGGATAATAGTTGTAAAAGAGAAGGCCAAACG 833
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y        954 GAATATGAAAAAGAGGTAGAAGAGATGAAGCACATGACAAGGCAAGAGTATGTTGCCTCA 1013
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y       1014 CTGCGCAGGAAAAGTAGTGGTTTCTCTCGTGGTGCATCGATTTATCGTGGAGTAACAAGA 1073
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y       1074 CATCACCAACATGGAAGATGGCAAGCTAGGATAGGAAGAGTCGCCGGTAACAAAGACCTC 1133
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Db       1391 ATCAT 1395
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